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A
PRACTICAL ESSAY
ON THE
GOOD AND BAD EFFECTS
OF
SEA-WATER AND SEA-BATHING.

BY
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AT MARGATE.

Lavatio corporis frigida bona est ad longitudinem. BACON.

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N. B. *The Profits arising from the Sale of this Book will be appropriated to the Fund of that Charitable Institution, the General Sea-bathing Infirmary at Margate.*

TO
THE PATRON,
PRESIDENT,
VICE-PRESIDENTS,
TREASURERS,
MEMBERS OF THE LONDON AND
MARGATE COMMITTEES,
SUBSCRIBERS,
BENEFACTORS,
AND ALL ZEALOUS FRIENDS, AIDERS,
AND SUPPORTERS OF THAT
HUMANE INSTITUTION,
THE
GENERAL SEA-BATHING INFIRMARY
AT MARGATE,

THE FOLLOWING

E S S A Y

IS MOST RESPECTFULLY INSCRIBED BY
THEIR MOST FAITHFUL AND OBEDIENT SERVANT,

THE AUTHOR.

THE 17th

of the 18th

of the 19th

of the 20th

of the 21st

of the 22nd

of the 23rd

of the 24th

of the 25th

of the 26th

of the 27th

of the 28th

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of the 30th

of the 31st

of the 1st

of the 2nd

of the 3rd

ESSAY

ON

SEA-BATHING.

IN the practice of sea-bathing we have not only to attend to the nature, temperature, power, influence, and effect, sensible and insensible, that result from the use and abuse of the bath and essential auxiliaries, but also to the natural and acquired state of the habit or constitution: the nature of a complaint, and times and periods of its use; *ex. gr.* there is much difference in the power and effect of the sea-bath between going into it with an empty and full stomach; between going in temperately warm, and in a fervor and perspiring, or chilly; between going in prepared and unprepared; between going in courageously and

timidly: by all the first there is safety and good to be expected; by all the latter, hazard and danger, except in that one instance of it, in the bite of a rabid animal, when the bather's mind must be alarmed by the greatest fear, and flaccidity brought on the system.

There is again much difference in the effect of the sea-bath used immediately before and after a periodical evacuation, such as the menstrual; or before and after a miscarriage: bathing before a period hastens on, and increases, the discharge: bathing after, strengthens the collapsed uterine system against a premature and violent, irregular return of them; it helps conception, and to enable the uterus to retain its increasing burthen to the full time of gestation. Bathing immediately before a febrile exacerbation, or convulsion, or gouty paroxysm, by stimulating to action the solids, and thereby accelerating the circulating fluids, hastens on, and exasperates, the symptoms.

The efficacy of the sea-bath is much prevented by a person's fear, especially the feeble, nervous, irritable, habit; such as the hysterical or hypochondriacal, or those that may have an antipathy to bathing (hydrophobia excepted), which, if
 2 they

they have, the intention of the bath will be frustrated: it is unfortunate, as there is really no danger; they are not carried beyond their depth. If they will only shut their ears, eyes, and mouth, and trust themselves for a moment in the hands of their sagacious, faithful guide, all will be well. Timid persons ought to take a glass or two of generous cordial wine on entering, and on coming out of the bath, if they are the least chilly. Ardent spirits of any kind are improper; they dry, burn, then chill, and check genial perspiration, stupify and confound the senses, and destroy the nervous system; and, instead of exhilarating the spirits and appeasing anxious solicitude, bring on horrors, tremors, or shakings, and depression of spirits, until disease abbreviates the term of life.

When there is a general or particular weakness in the secreting organs; when the stomach and bowels are unable to perform their excretory functions, or the fibres of the arteries cannot vibrate to accelerate the languid circulation, and the spirits are flat, secretion obstructed, or slow in the glands, or uterus incapacitated to throw off its monthly purgations; or sensible or insensible transpiration is diminished; the sea-bath is efficacious in purifying the habit and maintaining the equipoise.

A Miss P——, at N^o 18, Holborn, aged eighteen, came to Margate, in Autumn, 1792, to bathe in the sea. She was of a pale chlorotic complexion, and had been four years in the hands of the faculty for bilious bowel-complaints, and irregularity of her monthly terms, which never were in due quantity: in short, she had no one secretion or excretion that went regularly on. She would be frequently constipated, attended with racking pain and distention of her stomach and bowels. Her complexion was livid; her lips pale, eyes dull and languid, and her temper exceedingly fretful and impatient. On her coming from the third bath she felt herself extremely sick and squeamish at stomach, which increased with great commotion and disturbance through her whole frame; and by the next day her hands were much swelled and inflamed, and full of small limpid ferrous vesications. Mr. *John Silver*, her surgeon-apothecary, called me instantly to her before any thing was done. I desired her to make herself easy, and to be thankful; for that nature, by virtue of the sea-bath, was doing great things for her, by expelling the morbid matter from the internal habit on the safest part of the body; and that we had only to assist nature, as she pointed, in her salutary efforts, to exterminate noxious humours

mours and the causes of them, and supply their room with more kindly particles to enter in and assimilate with the blood.

I simply ordered a fomentation to her hands of a decoction of mallow leaves and elder flowers twice a day, and cataplasms of barley-meal made with the same liquor, to lie on intermediately; and by the next day the inflammation and pain abated, and a ferous limpid humour began to run, which increased in quantity, at every dressing, twice a day, and was so intolerably fetid as even to forbid her mother coming into the room. Thus it ran for a week, and then kindly dried up; when her feet became in like manner affected, discharged, and healed up also in a week. After these discharges she found herself in the enjoyment of perfect health, and every thing became regular in her constitution. She took two or three doses of gentle physic, and then went round the town of Margate to shew what a miracle the sea-bath had performed on her: she took only one diaphoretic julep during the time. She left Margate in perfect health and good temper, pleased with every thing and with every body. This lady waited on Dr. Lettsom and others, to give ocular proof of the great efficacy of the bath.

The sea-bath not only promotes the morbidly suppressed monthly terms, in habits especially unaccustomed to bathing, but other sanguinary hæmorrhages, and the running of issues; it stimulates, expands, and gives energy and force to the debile flaccid solids; rouzes, warms, and actuates the cold indolent mass of fluids, and separates noxious particles from the purer juices of the body; such as in the cold, pale, languid, feeble, chlorotic virgin, and restores her to warm comfortable health, strength, and colour. Nature is brought into her more regular line. To say sea-bathing never fails as an *emenagogue* would be saying more than is true; for, though I have known it to relieve many obstinately obstructed, still I have known some to resist its force, and be obliged to have recourse to other means: it is, however, an excellent auxiliary to medicine.

The sea-bath is certainly a great assistant to the organs of digestion: it enables them to act on the aliment for elaborating the crude and imperfect chyle, or nutritious juice, for a subsequent sanguification. A *cachectic*, or depraved state of the fluids, is induced by excess thrown in, and a defect of the digestions and natural discharges.

The

The *uterus*, being the spring, or fountain, of many complaints peculiar to the female sex, I have always considered its irregular action, attended with either a morbid obstruction or an irregular profusion, of the *catamenia*, as the first step necessary for the physician to attend to in the cure of their complaints. I have never observed any to yield kindly till that was regulated. There is a great difference, however, in the irregularity being primary or secondary; for, if secondary, remove the primary cause, and the concomitant effects will cease; for instance, dejection, fretting, grief, or disappointment, to the females of great sensibility and irritability of nerves, may be traced to be the occasional cause of many of their complaints; such as hysteria, syncope or fainting, epilepsy, obstructio & profluvium mensium, abortion, head-ach, mania, convulsions, and nervous complaints in general; all which are objects of sea-bathing, judiciously managed.

That sea-bathing should have the power and property of removing suppressed menses, and of restraining a too abundant flow, *i. e.* open and shut, relax and brace, appears somewhat paradoxical; but it is fact, and for which I have the suffrage of the faculty on the coast; of the oldest

female sea-bathing guides at Margate; of some of the great antient and modern writers, and my own experience for it, though none have attempted to assign a reason for its having two such very opposite effects. Virgins who have had their terms obstructed, some three, some four, five, six months, have been relieved after bathing a few times in the sea; some after a few weeks, and some have required a short course twice or thrice, previous to the periods of menstruation, before they became perfectly regular and in due quantity.

Weakly women, again, especially after bearing children, that have an irregular profusion, have been relieved by sea-bathing in proportion to the strength they acquired by it: a very long course debilitates, and increases the flooding. Much depends on their being laid softly down in the water, on their back, and instantly sent out again, and not going in oftener than once or twice a week.

Sea-bathing has been recommended as efficacious in *fluor albus*. I wish I had found all the faculty and female guides in one opinion; but they are not. Some say it is very efficacious, while others say they never knew it to be of any service
in

in it. To compromise the matter, though I am not warranted to say, from my own experience, that it has effected a cure by itself, yet I have found it an excellent auxiliary to medicine. *Ætius* advises the cold sea-bath for the *catamenia* when too abundant, *fluor albus*, and *lapsus seminis*.

The late illustrious Dr. *Robert Whytt*, king's professor of medicine at Edinburgh, says, in his *Treatise on Nervous Disorders*, "that he has known
 " a profusion of the menses and *fluor albus* cured
 " in a great measure by sea-bathing, when medi-
 " cines had failed."

Mr. *George Slater*, surgeon-apothecary at Margate, favoured me with a list of complaints in which he found sea-bathing efficacious, namely, in glandular obstructions, chronic rheumatism, scurvy, leprosy, hysteric and hypochondriac affections, nervous complaints in general; *fluor albus*, gleet, feminal weakness; diabetes, rickets, and in almost all complaints arising from relaxation of the solids; in *profuse* and *suppressed* menses from debility, and not from inflammation and plethora; and in preventing abortion.

Mr. *Edward Daniel*, senior, surgeon-apothecary at Ramsgate, favoured me also with a similar
 list

list of complaints in which he found sea-bathing to be efficacious, namely, in scrofula, hypochondria, hysteria, chronic rheumatism, scurvy, in some chlorotic cases, debility, after fits of illness, *uterine fluxes*, *fluor albus*, and in low nervous cases. This was accompanied with general observations on the use and abuse of sea-bathing, as will appear occasionally in the sequel, and in my intended Essay on the warm sea-water bath.

Mr. *Thomas Mantell*, surgeon-apothecary at Dover, says, “ that a *profluvium mensium* he regards in two lights, as proceeding from *plethora* and *debility*. In the first he has found sea-bathing to do hurt ; in the latter to be extremely beneficial. In that kind of *mænorrhagia* which sometimes attends pregnant women he has seen very good effects to result from its cautious use.

“ In *fluor albus* and *seminal weakness* he has found the sea-bath of infinite use, though not in every species of fluor, *ex. gr. in gonorrhœa virulenta*.”

Mr. *Samuel Frome*, surgeon-apothecary at Broadstairs, says, “ the effect of cold bathing on the human body should be that of a tonic or general bracer ; nevertheless it will not agree with
every

every subject who is debilitated, and may require a tonic remedy; for, if there be no reaction on the sedative effect of the water, the consequence will be that of rendering the person cold and unpleasant all the day, and will debilitate instead of restore. In such a case he prefers warm sea-bathing, which, by exciting a comfortable degree of warmth, gives vigour to the system.

“ Females who do not menstruate regularly, or have not begun at the time expected, if it arise from relaxation, attended with shortness of breath, pale fallow countenance, prostration of strength, pain in the loins, stomach, &c. I would, he says, recommend cold sea-bathing, provided after one or two trials they find themselves warm and comfortable after bathing; but if, on the contrary, they should be cold, to try the warm sea-bath, for the reasons given; but says, we should well discriminate between the females who do not menstruate from debility of the system, and those who do not from plethora, or a rigidity of the uterine vessels, attended with headach, tension of the veins, &c.; for, as in the former all tonic remedies must be used; in the latter, bleeding, especially just before the period when menstruation should take place, in a small quantity, gentle aperient medicines, and putting the feet into
warm

warm water, should be tried, of course sea-bathing must be very improper, upon the principle of its being a tonic: in fact, every thing should be done in this instance that will relax, while in the former every thing that will restore; therefore, the *fair sex* should not indiscriminately bathe, but should previously consult with some judicious physician or surgeon. And it is a mistaken notion, when young women do not menstruate regularly or not at all, that their complaints arise from that cause: the fact is, there is something wrong in the system, and menstruation is merely the effect of the constitution being right; and therefore, where it does not take place properly, we should endeavour to mend the constitution.

“Too great a profusion of the menses may likewise arise from debility or plethora; the one producing a passive hæmorrhage, the other active, which should be moderated as its nature may require.”

Amongst the female guides, Mrs. *Pavey* (nineteen years a guide) speaks the most decisive on its effects on *fluor albus*: she says, she hath bathed many ladies in the sea for this complaint, who experienced a perfect cure.

The facts being thus so far ascertained, I had next to trace effects to their causes; and I am satisfied that much depends not only upon the constitution but upon the season, temperature of the weather, mode of living, mode of bathing, state of the mind, stage of the complaint, length of a course, and distance of time between each bath. All which shew, that sea-bathing is more at present practised than a knowledge of it is, or can be in general possessed. Much will ever depend upon the judgment, discretion, and sagacity, of the rational physician, and other judicious, experienced, and well-informed directors, resident upon the spot, and confidence and compliance of consultants themselves to rational prescription, without which nothing advantageous will, or can be gained. Hit or miss, luck will be all.

Sea-water, whether used internally or externally, is a powerful promoter of the monthly terms; for I have known even the paddling of the hands or feet in tepid, and sometimes in cold sea-water, to quicken the evacuation, used, at the period of menstruation. I have known others who have indiscreetly, when in a fervor, and menstruating, plunge into a river, and have instantly stopped the *catamenia*, so as to affect the brain and greatly derange nature. Some of these I met with in the mad-houses in the county of Surrey,

Surrey, which I attended twelve years with the visiting magistrates, in virtue of an act of parliament ; an act that does honour to humanity.

Those for whom I have been consulted early that were in a maniacal delirium from a sudden suppression during menstruation, I have relieved, by forcibly bringing on the monthly terms at the next ensuing period.

I have never yet heard that sea-bathing has caused mania, or madness of any kind. As the tepid sea-water bath has proved efficacious in febrile and puerperal phrenzy, why may it not in raging mania, in which there is heat and density of blood in the brain, attended with an impervious skin ? I have not yet seen or heard of it being tried. In melancholic mania the cold sea-bath will suit best ; but where the *globuli sanguinis* prevail above the natural degree or quantity of serum, the mind becomes precipitate, furious, inconstant, and flighty ; it indicates a thin, attenuating diet, gentle exercise, and the tepid bath.

The female guides all tell me, they attend ladies in the sea-bath during menstruation, as well as when off, and it does not stop it on them ; it rather quickens the discharge. Moreover they say,
that

that many ladies have bathed during pregnancy, and no miscarriage has happened in consequence of sea-bathing. One of the guides, Mrs. *Sharp*, went so far in praise of it as to affirm it to me for fact, that she bathed a lady from conception throughout her pregnancy, to the last hour, and never had a miscarriage, and that the last delivery she had was much better than any she had had before; which only shewed to me, that excess of the bath had relaxed and paved the way for a miscarriage which she had last season (1794).

The female guides are certainly very fertile in bringing subjects to the state; and all tell me that many ladies have come and bathed in the sea and conceived, though some of them, many years married, never had before, and went their full time; nor did some stop there, but went on regularly afterwards in the productive line of bearing; wherefore we are led to consider sea-bathing, by strengthening the uterine system, as a potent remedy for barrenness.

The stimulus of the sea-bath medicinally used, and where it can be borne, no doubt braces and gives tone, warmth, and energy to the system, and if so, it must to the uterine system; but, if
carried

carried to excess, especially in delicate irritable habits, it debilitates, enervates, relaxes the solids, exhausts the spirits, breaks down and vitiates the blood, and thereby increases the symptoms of a complaint that terminates in abortion or cachexy.

Three summers ago an amiable lady, aged thirty-seven, who had been six years in the East Indies with a first husband, and after bearing nine children to him and a second husband, meeting with some domestic grievances, her excellent natural constitution became injured, and a *profluvium mensium* ensued. She was recommended to bathe in the sea. She went to Devonshire, and, to assist the bath, her doctor gave her some tonics, such as the peruvian bark, by which, and the bath discreetly used, she received much benefit, and returned after a short course to London. Some months afterwards her symptoms of weakness returned, and she came to Margate, and bathed not only one, but three successive summers; but, instead of using tonic medicines and strengthening diet, she told me, her *physician* had strictly enjoined her to live on the low water-gruel and vegetable diet; no animal food, or even a glass of cordial wine, or any thing that was comfortable, allowed her; and moreover added, that

that she was much in the habit of taking purgatives, the effects of all which were, as might be expected, acidities to prevail in the first passages, with inactivity of the bowels; and she became often constipated with flatulent bilious colics; and her monthly, I may say weekly, discharges (*fluxus uterinus*) became floodings, and the colour and consistence rather like *loturæ carnium recentium* than natural. Her usual fair and ruddy complexion became fallow, her lips livid, her eyes dull, and her features ghastly; a febrile paroxysm came on every evening about seven, and lasted until morning: on the accession of the fit her right side over the region of the liver would heave up to a considerable size, and subside again on the declension of the fit. Her tongue was furred and brown, attended with other symptoms of a slow remitting fever far advanced. In this deplorable state, and after having the sentence of despair passed on her by her physician, she came flying to me very much alarmed. Her countenance was ghastly—the very picture of death. She was exceedingly hasty and anxious to hear my opinion of her case. I bade her make her mind easy; for, that I could account to myself for all her symptoms, upon the principle of *inani-tion*, alias *starvation*, and persisting in the bath beyond what nature could bear rather than upon

that of an irremediable disease, and therefore, notwithstanding all that had passed between her and her doctor, I trusted, by putting her upon the very opposite plan, I should be able to procure her a *reprieve*, and that in no long time.

I forbade her going any more in contact with the water, and enjoined her to forsake the low meagre *soup* and *vegetable* diet, and live more generously on fish (shell-fish especially) and animal food, and to drink a few glasses of generous red port after dinner; but to begin and increase the quantity of food and wine gradually, as all great and sudden transitions, especially of these kinds, are dangerous; and I ordered for her a tonic febrifuge medicine; all which she strictly attended to; in three days her evening fever left her; in seven she had not a morbid symptom. She got on horseback, and rode repeatedly about the island, acquired strength daily, and returned in two or three weeks to London in high health and good spirits, and continues to enjoy it. Mr. *John Silver* was her apothecary while I attended her.

A married lady of Stratford, aged thirty-three, the mother of several children, on grieving for the loss of a favourite child, &c. her health became impaired: she became subject to hysteric fits, at-

tended with profusion of the menses ; and so great a failure of spirits that the least flurry or surprize would throw her into a fainting fit, and bring on floodings. After having taken much medicine without effect, she was sent to Margate ten years ago to bathe in the sea, which she did three successive summers, but at length, instead of relieving her, it exasperated her symptoms, that is, from one fit in a week to four or five in a day ; and she would be seized with a fit in the very act of bathing—an evident proof that the bath was carried too far. I was then consulted, and I forbade her bathing any more, and enjoined her to live more generously. I wrote for her a few cordial antispasmodic medicines, which she strictly attended to, and in a very few weeks she left Margate in perfect good health, and soon after gave her affectionate and endearing husband another pledge of her love, and continues now, after several years, to enjoy good health. *Mr. George Slater* was her apothecary.

The cordial intelligence had a very happy effect on these two ladies, which I consider as incumbent on me to give whenever I can with propriety, and without betraying my judgement : in which case it would be cruel. Hope gives energy to medicine, and perseverance to method :

Blessed hope, the universal balm
To sickness, pain, and misery below.

Lætitia cordis vitam hominis est.

The physician is called upon to comfort, support, and relieve nature in her difficulties agreeably to her laws and indications, not to depress and kill. *The merciful condemn not.*

The virtue and efficacy of the sea-bath is not always so sensibly felt immediately while on the spot, as in a few weeks afterwards. In the above two ladies' cases, wherein the bath had been persisted in too long, that is, until their habits were too much despumed, a morbid turn given to the fluids, and loss of tension to the solids; yet, on the bath being desisted from, I found it easier to restore their much debilitated habits by proper medicinal and dietetic adjuvants than if the symptoms had arisen from any morbid cause. I have found it less difficult to cure hysteria after a course of sea-bathing, though I have never met with any yet cured by it alone. I say the same of *epilepsia* and some other diseases, wherefore in certain cases, it is only auxiliary.

ABORTIONS.

I have seen and heard of but few instances of miscarriages having happened in consequence of sea-bathing; one, however, has occurred, and it is for me to mention it and the cause.

A Mrs. B——, ten weeks gone in pregnancy, and who happened to have one or two miscarriages, came from London a few seasons ago, to Broad Stairs, to bathe in the sea to prevent this circumstance. After the second bath a flooding came on: *two* eminent *accoucheurs* (*Slater* and *Mayhew*) were called to her, and I to their assistance next morning, when I found her flooding, and had flooded a great deal, and was exceedingly low, though no deadly symptoms had come on. We supported her by proper nutritives and a few medicinal draughts, &c. A miscarriage saved her. Her uterine system was too weak and irritable to bear the stimulus of the bath.

Mr. *Mantell* says, he has attended several ladies in pregnancy where sea-bathing had been prescribed, but not always with success: he instances one lady who was sent in the year 1784 to the coast, both for the advantage of bathing and

the sea air, to remove an *amenorrhœa*. She attended strictly to the advice given ; but, after following it for some time, symptoms of an abortion came on, which speedily took place, and convinced her that she and her physician had been for three months mistaken ; and though none of the *emenagogue* medicines which she had taken took effect, sea-bathing did, though not in the most desirable way.

These two instances and one more lady at Margate, that was threatened, and obliged, a few seasons ago, to quit the practice, I confess, rendered sea-bathing during pregnancy somewhat equivocal with me for some time ; but not meeting with, or hearing of any more such, though a great many pregnant ladies have since come to Margate and bathed ; and having the suffrage of all the female guides in favour of it, my fears are greatly done away, *i. e.* excepting in very delicate, nervous, irritable habits, indicated by a quick pulse and preternatural heat, under which circumstances, I still think sea-bathing hazardous and unwarrantable, especially during the first months of pregnancy.

Where I have observed the *sea-bath* to be of most service in an immoderate profusion of the *menfes*, it has been, when used immediately, or
soon

soon after a period ; and, for preventing abortion, soon after conception, or an abortion when the *uterus* is in a collapsed state ; and it and the general system is more capable of receiving new elastic tension and spring. Mrs. *Sayer* and the other guides agree with me in this.

Those who are afraid of the sea may have a spray of sea-water let fall on them, or impinged against a debile lax part, which powerfully roborates, and gives vibration to the debile vessels. The sea-bath dislodges cold stagnating humours in the course of the circulation, by sensible and insensible transpiration, and warms and invigorates the system, and thereby fortifies the womb.

If the sea-bath had not only the effect of causing universal oscillation and contraction, but also expansion, it would not be so efficacious in subduing viscidities, or preternatural cohesion in the fluids, and fitting them for passing through the glandular strainers ; and the noxious principle for being separated, and either depurated on safe parts, or cast off by the different emunctories or outlets from the body, to leave room for the introduction of new benign particles fit for the process of assimilation, animalization, and reparation of the waste. Unassimilated particles bring nothing to

the stock of the animal fibres, for making them strong and elastic, in their alternate contraction and dilatation.

Animals and vegetables, as well as the ocean, require to be kept in a continual fluxionary state of ebbing and flowing, contracting and dilating, heating and cooling, filling and emptying. And though some require oftener and greater mutation than others, yet none bear with ease the violent extreme long continued. Extreme right is extreme wrong. Swimming long dispirits more by the relaxation of the water than by the exercise, and gives cramps, chills, and rigors. The sea-bath does not altogether depend upon the mere stimulus of heat and cold on the organs of sensation, but also upon the absorption of some of the aqueous saline particles, or how comes such great changes to take place in the animal œconomy? Sea-water, though very penetrating, as the orifices of the inhalent and exhalent vessels are induced to contract on entering the cold bath, there cannot much of the watery particles be absorbed, or the animal fluids pass off on a momentary dip: only, on a long and a frequent immersion, laxation and debility take place. The cold application to the skin, whether of air or water, contracts the pores, and retains innate heat, *i. e.* con-

condenses the rarefied spirituous air, which, on the pressure being taken off, breaks out again with greater force upon the superficies of the body.

As gravity and pressure must be taken into account, a dip in the sea must be preferable to a dip in a tub or river. In the tepid bath neither gravity nor pressure, nor spring is so much wanted, only longer continuance to answer the purpose of a relaxant, softener, and cleanser. All that is wanted by the sea-bath for the animal machine is to bring about the equipoise or mutual balance between the solids and fluids in the system, for maintaining the *pabulum vitæ*, or spark of life.

After fatigue and weariness, whether by travel, business, or incessant pursuit after pleasure, no matter which, if the spirits be exhausted, and the body languid by the nervous chords being too far stretched; or, after a sprain or dislocation, before inflammation and fluxion take place; or, after a regular paroxysm of gout or rheumatism; or, indeed, after any violent fit of illness, as fever, there is nothing that so soon, or so safely, braces up, or gives elastic tone or tension to the debile relaxed fibres, and acceleration to the slow moving

moving fluids, as a general dip, discreetly used; it inspires the soul (*divinæ particulam auræ*) with rapture and delight; and the being satisfied in the idea of having secured an interest in acquiring and re-establishing health — is a good point gained.

Immersion in the sea is not only of use to the human species but to the brute, such as the horse and dog: it cleanses, strengthens, animates, and preserves them. Many are the great good effects produced by external application, either by increasing or diminishing animal motion, when below or above the standard of health, as is manifest by the stimulus of heat and cold.

None catch cold by the act of sea-bathing but the unthinking, who plunge into the water while in a fervor, or dress after it on a wet skin. I believe it is allowed by physiologists, that wherever there are emissaries, there are also absorbing or inhaling vessels: the body is at no time so liable to catch cold, or infection, as when perspiring.

The cold bath resists, on coming out of it, the sensation of cold; but on coming out of the warm relaxing bath, the fluids being then rarefied, and the pores of the skin open, the body is more susceptible

fufceptible of cold ; but, the moment the cloaths are put on, a genial glowing heat diffufes over the whole body.

To maintain health, the human body requires a certain degree of circumambient weight and preffure, to give tenfion and vibration to the moving fibres, and velocity to the blood in its circulation, and invigorate the fecreting and excreting organs, for performing their functions daily in feparating and expulfing the recrementitious, and retaining the nutritious, particles for the fupport of life. And, if the gravitation, or weight of air, be not fufficient to maintain the fluids within due bounds, they will rarefy, and be hurried on crude and indigefed, and the circulation becomes irregular, fometimes too faft, and fometimes too flow, when recourfe muft be had to a more denfe fluid to maintain the equipoife ; viz. water, which is eight hundred times heavier than air, and fea-water is ftill more heavy, buoyant, infinuating, and deterging, than frefh, by the principles it poffeffes ; and has more force, either as a bracer or relaxer, as ufed.

The degrees of preffure of water depend, not only upon the principles it contains, but proportionate to its depth or diftance from the furface :
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the deeper, the colder and more compressive and insinuating it is. A fresh dead corpse thrown into the sea sinks; but, there being no resistance to the influx of the water, the body presently fills, and floats again on the surface immensely distended. A well-known experiment shews the vast compressive and insinuating force of the sea: sink an empty quart bottle, firmly corked, sealed, and wired, by a line and lead, forty, fifty, or sixty fathoms in the sea; on hauling it up instantly again, the bottle is found full of water, and the cork in the neck of the bottle inverted. Nature, abhorring a vacuum, forces the cork, and the water rushes in. As Homer says,

“ Vast is the force of the deep flowing sea.”

By the sea-bath giving new spring to the animal solids, and increased motion to the circulating fluids, preventing depravation, and supporting the animal powers, it becomes one of the greatest alterants in nature.

Though sea-bathing increases and exasperates febrile and inflammatory complaints, yet hereditary and slow acting chronical affections are objects of it. It is specific in many, regularly and judiciously conducted.

Sayer,

Sayer, Philpott, and the other bathing guides here, all agree in saying, that they consider sea-bathing as specific in *chronic rheumatism*: that a course of six weeks or two months, going in three or four times a week, leaves little or no remains of the complaint; and by revisiting the place one or two seasons more, completely conquers it, and fortifies the system against future attacks. They agree with me, that not any disease, that is attended with acute pain and inflammatory diathesis of the blood, or with visceral inflammation or exulceration, is proper for sea-bathing: these are objects more proper for the warm sea-water bath, for which it is very efficacious.

In scorbutic rheumatism and scorbutic atrophy, sea or land scurvy, leprosy, tetters and other cutaneous defecations and glandular swellings, it is efficacious. I have not observed it to be of any use in *psora* or itch: it enrages it, especially if inveterate, and of long standing. Sea-bathing is of use after it is deadened in cleansing the skin.

Celsus and *Antyllus* mention sea-bathing as a remedy for dropsy; and *Zacutus Lusitanus* mentions a dropical patient, who being necessitated on a voyage to drink sea-water instead of fresh, was
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thrown

thrown into a *diarrhœa*, or loofeness, and cured. And *Barnard* mentions an *ascites*, or dropfy of the belly, cured by drinking sea-water and bathing in the sea. I have enquired particularly if there have been any instances here to confirm this, but I cannot learn of any having come to bathe for it. In an incipient dropfy, or scorbutic œdematous legs, it may, and has been of service, but in a confirmed dropfy I have no idea of its being of any use. It is rather preventive than curative of dropfy. I rather refer it to the warm sea-water bath, as it sweats the bather after it very profusely, and sweating is most wanted in dropfy. In œdematous and anasarcaous swellings the blood moves slowest in the skin, and when the circulation is slow the skin is pale and cold. Sea-bathing, by its contractile force and stimulating power, impels the fluids of the body from the periphera to the center and forces them into their channel, such as the urinary, until the pressure of the water is taken off, and moderate exercise and friction after the bath takes place, when the circulation quickens, and the heat reverberates, and is renewed with force on the skin, and muscles, which acting kindly on the *papillæ nervosæ*, communicates by sympathy sensation to lost feeling, and thereby renews lost action in the nervous system; the momentum and velocity of the slow languid blood

blood is increased: it becomes better digested and more fluxile, and fitter to pass through the *minima vasa*, or minute extreme vessels, to the relief of the inundated habit. Secretion is promoted, as we evidently see by the increased discharge of glandular juice from glandular fores, a sign, by the bye, of coming health; for, by it noxious particles are excerned, and the body is purified; and, as the fluids approach nigher to the natural state, the discharge gradually lessens, and the fores kindly heal: the hard impervious skin is softened, opened, and impurities cited from the interior recesses, and these fluids revel on the exterior superficies of the body, whereby the glandular and sanguiferous systems are relieved, sensibly and insensibly, by the skin, the breath, the urine, stool, bile, pancreatic juice, &c. and the solids are quickened and invigorated, the vital principle supported, and all the animal actions restored.

For the *tympany*, or dry dropfy, *Cælius Aurelianus* commends swimming in the sea and sweating after it. Possibly it may be efficacious, but I have not seen nor heard of its being tried.

By the sea-bath strengthening the debile system, and promoting the sensible and insensible discharges, it is efficacious in palsies. Besides the
very

very great cure of palsy it performed on Mr. *Allen* of Walworth, whose case I gave in my *Medical Remarks*, I have seen several more since perfectly restored of palsies by it, especially young persons, and where the complaint had been of no long standing. Some even of *paraplegia*, or universal palsy, have been restored to perfect health by it. The following well known and creditably attested fact is given me by,

1. *Zechariah Brazier*, a respectable householder in Margate, formerly a sea-bathing guide, and the first who conducted a bather in a simple machine, a cart, into the sea at Margate, who says,

Twenty-five years ago a Mr. *Sanguinetta*, aged twenty-four years, was brought from London to Margate, to be bathed in the sea for an universal palsy, *i. e.* all below his head was without sensation or motion, and he was reduced to a mere skeleton: he retained the faculty of speech, and could chew and swallow the food when put into his mouth. He, and his wife, lodged at his house. He had been in this state several months, and the art of the faculty, and the Bath waters had proved in vain.

“ *Brazier*

“ *Brazier* says, he had to carry him to, and fetch him from, the bath on his back; and, in the bathing-machine, had three men and his own wife to assist him. When he was stripped, two of the men threw him into the sea as a log, while he and the other man stood in the water to receive him, and keep his head above water after every dip. After holding him some little time in the water, they took him out, rubbed his body long and well with coarse cloths, then dressed him.

“ After the seventh or eighth time he was thus bathed, he began and made a small struggle with his hands and feet in the water; and though it was but little, yet it was enough to indicate returning strength. In eight weeks he could lift the spoon to his mouth, take hold of his two crutches, and walk across the room: the tenth week he crept down stairs to the parlour, where, getting into a passion with his wife, he threw one of his crutches across the room at her. After this he walked to the bathing-machine with one crutch only, where a single person now managed him in the machine, and handed him into the water; then he struck out, and attempted to swim. After that he threw away his second crutch, and walked with a cane, took up his German flute and played;

ed; which instrument he had been a great master of; a convincing proof of his having got the full use of his arms, fingers, &c.

“After thirteen weeks’ bathing, two or three times a week, he returned to London with his wife, perfectly restored, without the smallest assistance of medicine at Margate. If he took medicine before, he was not in the smallest degree benefited by it. After he left Margate, his wife bore him seven children. He died only two years ago, that is, he lived twenty-three years after leaving Margate.”

Brazier called on him in London, at his house in Houndsditch, the year after he left him, and found him the very picture of health, and offered to run a race with him.

This case is farther attested by Mr. Nathaniel Solomon, silversmith in Margate, and Phœbe Solomon, his wife, who were lodgers with him at the same time.

2. *S. Hubbard*, bathing guide for eighteen years; informs me, a gentleman of forty was struck with an universal palsy: his words were

inarticulate and unintelligible: in this deplorable state he was brought to him to be bathed in the sea. After he had bathed three months, he could speak distinctly and plain, and sensation and motion returned to every part of his body. His cure was complete. He had been ill two months.

J. Sayer, thirty years a sea-bathing guide, says, he has not bathed many with palsy; but, of the few he has, all received great benefit. One of the worst he had, had lost the use of his side: his face was miserably distorted, his mouth drawn to one side, and his words were inarticulate. He had been a stout man, but now was much emaciated and enfeebled. After bathing a couple of months he left Margate perfectly restored to full health, and his flesh plumped up again.

G. Philpot, sea-bathing guide for upwards of twenty years, says, he has bathed a good many with palsy; and has often had a deal of pleasure in observing the special good effect the sea-bath had in these cases, especially in young persons.

Mrs. Philpot, nineteen years a sea-bathing guide, lately shewed me a young lady of thirteen, who had had an *hemiplegia*, or palsy of one side,

perfectly restored by the sea-bath: she had bathed between two and three months.

T. Wood, a sea-bathing guide for upwards of twenty years, says, he only bathed three paralytics; and though, these came most grievously afflicted with the complaint, all went home well after a course of sea-bathing.

T. Hughes, sea-bathing guide eight years, had a Mr. *Nightingale*, a breeches-maker, from London, brought to him in 1793, to all appearance in a dying state, to be bathed in the sea: his looks were ghastly, pale, his words unintelligible, and was without the least feeling or power of motion of any part of his body. After he had been bathed in the sea eight or ten times, by the help of men, feeling and motion began to return, which did more sensibly every time after that, insomuch that he soon walked up and down the steps of the machine and bathed himself, put off and on his cloaths, and walked to and from his lodging.

On his coming out of the bath, his skin was always well wiped and rubbed, not only with coarse rubbers, but by a brush until the skin glowed with heat.

After

After bathing thirty-one times he got well; so well as to leave Margate in such haste as to forget to take leave of his kind bathers.

I could give abundance of instances of different species of palsy having been cured by sea-bathing; but these now given, I trust, are sufficient to shew its great efficacy in that complaint. Nor is the idea new; for, *Cælius Aurelianus*, a renowned ancient, commends, very much, swimming in the sea for all palsies, and *Celsus*, another well-known ancient, directs fomentations of hot sea-water.

In order to adapt the curative intention in that complaint, we have to attend not only to the proximate cause—and that is a good deal to be gathered from the nature and temper of the constitution; for, though nervous energy be deficient in them all, and, of course, the subtle actuating principle, whether it be animal spirits, phlogistic aura, æther, or other agency, that excites, and supports, the perpetual motion in the living subject—the occasional remote cause must also be attended to and traced; such as violent affections of the mind, the too free use of spirituous liquors, or of opium or other deadly poison; the too free use of mercury, without guarding against the injurious influence of cold air; or

great waste of blood; or congestion of fizy blood in the brain, compressing the origin of the nerves and spinal marrow; or debility and flaccidity of the muscular fibres and circular membrane, rigidity, &c. no matter which it be, life is destroyed by agency in excess or defect.

Sea-bathing has been recommended by some eminent ancient and modern writers, for the bite of a mad dog and other rabid animals; and, having some doubts of its efficacy in this myself, to satisfy my mind, I have made it my particular business to inquire of the Margate sea-bathing guides of its effect on those they had bathed; and learn from them all, that they consider it as a certain specific.

1. *T. Wood*, bathing guide, says, he has bathed many persons bit by mad dogs, and some of them barked much like a dog while they were under water; and they, and all who submitted to his mode of bathing, were cured, or when early used prevented from ever rising to any head; at least, he never heard of any of them ever going mad: on the contrary, always received favourable accounts of them afterwards. He says, the last that came were five, who were dreadfully torn by one and the

the same mad dog : four of them tamely submitted to be bathed agreeably to his mode, which is by keeping the head and body as long under water as they can bear, bringing up the head occasionally to respire, and down with it again, and this alternately, until their strength and strugglings in the water flag, and they have become feeble, their flesh soft and flaccid. Four of them bathed thus five mornings a week, some staid seven, some of them five weeks, during which time their wounds ran and kindly healed. They went home in high spirits, and continue well after several years. The fifth, who refused to submit, his wounds never healed, and he went raging mad, and was smothered—inhuman practice ! Binding the patient to his bed, as recommended by some, is less violent.

Sayer, Philpott, and Hubbard, say they have bathed many persons bitten by mad dogs and other rabid animals, and none of them ever went mad ; at least they never heard any thing but what was favourable of them. *Hubbard* says, the last person, so bitten, that he bathed, appeared much dejected and melancholic : after he had bathed with him a fortnight, his spirits got up, and he left Margate satisfied he was well.

Cold-bathing is recommended by *Baccius*, for the poison of the juice of mandrake: if it is efficacious for that, I presume it is for opium or other vegetable poison, and the cold sea-bath is preferable for either vegetable or animal poison.

Celsus recommends in *hydrophobia* to be thrown into a pond, and to drink of the water; but as I do not pretend to be acquainted with the virtues of pond water; until I am, I shall prefer throwing them into the sea, and drinking the water. None have been brought to Margate with hydrophobia to be bathed in the sea, so I cannot speak with the degree of precision on its effects in that stage of the complaint; but, as hydrophobia has never been known to come on during a course of sea-bathing, I am led to consider it as a powerful prophylactic, or preservative. Notwithstanding these facts, let none rest wholly on it to the neglect of other approved means. If sea-bathing has potent effect in the first stage of *rabies canini*, have we not reason to imagine it would be efficacious in this higher stage of the complaint?

In raging high, and in low desponding mania, or melancholia, *Sayer* says, he has not observed sea-bathing to do any good in the first: in the
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second it was of more service : it gave strength at least to the body, if it did not cure the deranged mind.

In *nervous* and *hypochondriacal* disorders, in which the mind is feeble, irritable, and unstable, the sea-bath, amusements, exercise, and the air of Thanet, have happy effects. I have observed it in every instance ; wherefore I would advise all who would deliver themselves from the tyranny of fear to throw aside their long-tried unsuccessful plan, quit the smoky town, and fly hither to the *Isle of Thanet* (the Island of Health); and I will promise them health, strength, and good spirits, unless the complaint be too deeply rooted ever to have *mens sana in corpore sano*.

Sayer says it is almost inconceivable the spirits got by sea-bathing and the air of Thanet, in all low nervous affections.

Aretæus, a famous ancient, recommends bathing in the sea for *headach* ; but neither I, nor any of the bathing guides, recollect an instance wherein it had such an effect : on the contrary, have known it to cause headach in improper and unprepared persons. There are various kinds of headachs. Perhaps it may be serviceable in nervous head-

head-achs. Rheumatic head-achs I have generally recommended to the tepid sea-water bath, and with good effect.

In *acute inflammatory gout*, cold sea-bathing increases the force of the symptoms, and hastens on an approaching fit, that has terminated, some in palsy, some in apoplexy, and some in violent distracting pain of the brain or other viscera: after it, sea-bathing roborates the debilitated joints. I have not seen its effects in atonic or cold numb gout.

Though the acute rheumatism be relieved by the warm, and the chronic or long-standing by the cold sea-bath, yet I have not observed any relief given by hot or cold in *sciatica*, called by some a species of rheumatism; by others, a species of gout. I have observed in a few instances the sea-bath rather to exasperate the symptoms; and none of the faculty warrants me to say it relieves: on the contrary, Mr. *Mantell* says, though it removed in one instance the pain, it was prejudicial by the extreme debility it brought on: on which he made the patient desist from the use of it, but a violent affection of the stomach with spasms and most acute pain succeeded, which, though relieved
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by powerful antispasmodics, it returned frequently, and at last ended fatally.

Mr. *John Silver*, surgeon-apothecary in *Margate*, lately introduced to me a patient of his just recovered of a most violent *sciatica*, that had baffled the faculty's art both in town and country for six months. He tried the cold and warm seawater bath at different times, which, instead of relieving him, exasperated his symptoms. His pain came on by fits: in one of these, the most excruciating he ever had, Mr. Silver was called to him: it was in the evening, when he found him much worn out by pain, fatigue, restlessness, and great anxiety of mind. He gave him a draught, in which he put a scruple of *succ. cicutæ spissat.* and a few drops *tinct. opii*, which instantly relieved him: he fell into sweet composure, in which he continued the whole night, and awoke quite refreshed: it was effectual; for, the pain no more returned. The draught was repeated for a few nights, to secure against a relapse. After that he bathed a few times in the sea, which had now most excellent effect in strengthening him; and he returned to London after a few weeks in perfect health, ruddy of complexion, and in high spirits. After a year had elapsed he sent a letter to Mr. Silver, acquainting him he continued well, and wished

wished us to publish his case, and the blessed medicine that gave him such instant and effectual relief to his unspeakable distress. His name is *Corb. M^cNeall*, at No. 44, Sackville Street, Piccadilly.

These two instances, without noticing more, have led me to consider sea-bathing as improper in *sciatica* before pain and inflammation be subdued, and that the affection is more of a species of gout than rheumatism.

In *Jaundice* and other bilious complaints, in which there is great disturbance in the fluids, and irregular movement in the glands, ducts, and extreme capillary vessels, the sea-bath hath been experienced to do good. I wish, however, that I could speak with more precision, either from my own experience, or the experience of gentlemen of the faculty on it.

J. Sayer, that long-experienced, observing, and intelligent bathing-guide here, helps us out: he says, “ I have known, on bathing in the sea for bilious complaints, and drinking the water, the bile to be set afloat in the habit, causing retchings, whereupon the person has been greatly relieved; but; whether it completed a cure in any, I am not (he says) competent to say farther than that the parties

parties allowed that they felt themselves better, which was visible by their losing much of the bilious hue from their skin and eyes." If so, it must be efficacious in forcing the bile into its natural channel, and removing obstruction in the biliary organs, which is all we want.

Celsus recommends the cold bath in summer for jaundice: the power and efficacy of the *sea-bath* was not so well known in his days for promoting the different secretions and excretions as now, or he would have given it greatly the preference for promoting the secretion of bile.

If *diabetes*, or flux of urine; *diarrhœa*, or flux of the belly; *fluor albus*, or whites; *lapsus seminis*; *gonorrhœa virulenta*, or other *fluor*, depended merely on debility and laxity, sea-bathing would be efficacious: but let the specific virus and inflammatory symptoms be first subdued before it is applied, or it will exasperate them. In simple venereal gleets, after superpurgation, I have observed it to increase the discharge at first of foul variegated matter: it scoured the mucous glands, and the discharge gradually lessened: it inflames fores at first, the discharge increases, then gradually diminishes, and the fores heal.

In *diabetes* we have to procure a due mixture and union of the crassamentum and serum of the blood with the new chyle: the bath primarily is not equal to change the saccharine quality in the urine without medical and dietetical help; and to attempt to suppress a diabetes by direct astringents is like locking a thief up in a house that breaks out with greater violence: the symptoms, which I have observed to ensue thereon, were obstinate constipation, suppression of urine, tumefaction of the belly, violent pain of the kidneys, urinary bladder, testes, loins; and, in the female sex, suppression of the catamenia, attended with febrile rigors, succeeded with burning heat, violent headach, incessant thirst, &c. If the complaint is from a scorbutic cause, it may possibly be of service. I cannot yet speak decidedly for or against it: the sea-bath is a strong diuretic: by its being so, it has swept the urinary passages of loose gravel. *Mercurialis* tells us he cured himself of a stone in the kidneys by bathing in the river *Arnus*; not, I apprehend, by dissolving the stone, but by impelling it thence when small. Nephritic pains are said to have been relieved by drinking sea-water.

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There is a rule, increase one secretion, and you lessen another. I have tried again and again to increase perspiration in *diabetes* both by external and internal means, but never have been able to effect it, even by the vapour or warm sea-water bath: they were uncomfortable in it, and came out chilly with rigors, which shewed that it disagreed, and that the cold bath was rather indicated; and, *vice versa*, where the cold disagrees the warm is indicated.

In profuse sweatings, Sayer says, "he has known many persons who perspired profusely, and were much emaciated and enfeebled by it, to have received very great benefit by the sea-bath."

In watchfulness the sea-bath has excellent effect if continued long: it causes sleepiness in the bathing guides: a sudden plunge rouses the lethargic, and makes a man sober that is intoxicated with inebriating liquor.

The sea-bath is efficacious in *frigidity*, *Venus languidis*, *languor* or indolence, *depression of spirits*, *scorbutic*, *hypochondriac*, and *maniac melancholia*: in some *spasmodic complaints*, such as *hysteric*, *epileptic*, especially in *St. Vitus's dance*, *Cynic spasm* or wry mouth, *tetanus* or locked jaw: in *chronic*
rheu-

rheumatism, scrofula, lepra, humoral sore eyes and dimness, lax spongy scorbutic ulcers, and promotes a discharge of depurated gross blood from the piles, to the great relief of the habit.

Sea-bathing after the small pox, chicken pox, measles, or other febrile eruptive complaints, and drinking the water, is efficacious, in purifying and strengthening a debilitated habit. It is specific in rickets, and in strengthening the spine and loins of infants, and preventing crookedness. There never was an instance of a deformed child who had been well nursed or bathed in the sea.

I have bathed, says Mrs. *Pavey* (nineteen years a bathing guide), a young lady of fourteen, a Miss S———, of Milk Street, London, this season (1793), who had not been able to stand upon her legs for six months from a weakness of her knee: during that period nothing of the food-kind staid on her stomach, only her breakfast, and she was reduced to a mere skeleton. After the first time she was in the warm sea-water bath she retained her food: after the third she could put her foot to the ground, and venture to stand. After that she had recourse to the sea-bath, by which she received so much strength that after the third time she walked from her lodging a considerable way

way leaning on her mother's arm. After having bathed twenty times in all, she returned to London with the full use of her limbs, and in fine health. She took no medicines worth mentioning while in Margate.

Mrs. *Budd* (nineteen years a bathing guide) says "she has bathed many weak ladies after fits of illness and after having lain-in, and all acquired strength and good health on it. One in particular she mentions worthy of notice, who, after lying-in, lost the use of her side, and was unable to turn in bed for ten weeks; nor could she put a foot to the ground for six months, owing to the tendons of her hams contracting for want of use: by bathing a course in the sea, the tendons extended to their natural length; her side acquired sensation and strength, and she went home in fine lively health. She returned two or three successive seasons, to confirm the good health she had acquired by the bath."

When the sea-bath has been too much at first for weakly persons to bear, I have made them begin with the temperate bath, and gradually reduce its heat till it came to its natural standard.

S. Hubbard (nineteen years a sea-bathing guide) says, “ A boy of three years of age, who, after being cut for the stone, was brought to be bathed in the sea: he was exceedingly weak, his belly hard and prominent, and his body extremely emaciated: a course of sea-bathing perfectly restored him, and he is now, at six years of age, a very fine stout boy.”

2. He says, “ An officer in the army, who happened to have two of his ribs broken, and was inwardly much bruised, by a fall from his horse. After the bones were supposed to be united, he could not endure the least jolting motion. After a few dippings in the sea, his pains vanished, he could bear exercise as well as ever, and left Margate sound and well.

3. “ A gentleman, he says, whose hand was rigidly contracted from a wound he received in the palm: by bathing for some time in the sea, his hand expanded, and was perfectly restored to its natural state.”

4. “ A child three years old was brought from London to Margate a few seasons ago, to be bathed in the sea for what the faculty called a
white

white swelling of the knee, but which Hubbard called a black one, as the skin was dark and tawny, and the tumefaction hard and indolent. He bathed the child first for some time in warm sea-water, and applied a poultice of *quercus marina*, sea-weed, with the liquor contained in the pods, to the knee twice a day: in five or six weeks it broke, and discharged a considerable quantity of thick creamy-like matter, which it continued to do for some time, then it healed up kindly.

After it broke, he bathed him for some time in the sea, and on the intermediate days, *i. e.* once or twice a week, he drank some sea-water to purify his habit, and his nurse took him home found and well; and this after the London surgeons thought the leg must be cut off. By a similar treatment he has sent many home whole of scrofulous and weeping sores and moist lepra."

5. "A young gentleman between five and six, who, it was said, by sucking a foul-blooded nurse had his blood dreadfully contaminated: he had fifteen running sores to be dressed twice a day; having besides a great number of dry brown scabs and bumps on the skin, and was so exceeding weak and feeble as to be unable to walk across the room. Whether there was any thing of a vene-

real taint in it or not he could not say, but the faculty supposed there was. He bathed his body in tepid sea-water for some time, and applied the sea-weed poultice mixed with grease to his sores, which brought them to discharge. After some time he left off the tepid sea-water bath, and dipped him in the cold; and intermediately purged him with some of the water. After six months the nurse took him home perfectly sound, and he is now a fine sprightly youth, seven years old. *Hubbard* bathed a gentleman several years ago, at the age of ninety-five, who received so much strength by it, that he returned and bathed a second course the next season, and when he left Margate he appeared to be no more than seventy. He had no complaint only old age, and the bath renovated it, hence the propriety of the motto to this work.

Though no one will recommend any to bathe in the sea, or cold spring bath, in inflammatory continued fever, yet I have no doubt of the efficacy of sea-bathing in the intermissions of some agues, several having, I am credibly informed, been cured of ague by plunging into rivers: by plunging into the sea there is less danger, and it has more potent effect. I, however, know of no infectious or putrid disorder in which sea-bathing would

would be of any service. I think, on the contrary, it would be death to the patient, and ruin to the others if sent.

OF SCURVY.

Sayer observes, “ that this complaint is very common in the constitutions of the people of this country, and many of all ages have visited Margate much afflicted with it, and, after bathing in the sea ten or twenty times, have found great relief; but where the complaint has been deeply rooted, it requires a repetition of the course, season after season, and to drink some of the water intermediately to purify the blood. Says, he does not know an instance wherein the sea-bath failed in curing this complaint, provided the person conformed to regular hours and proper rules of living.” *Philpott* was much afflicted with the scurvy before he was a sea-bathing guide, but has been for many years clear of it.

James Mitchener, twenty years a sea-bathing guide formerly, says,

1. “ Twenty-two years ago a female child, between three and four years of age, the daughter of a Mr. *Alversabello* of Hackney, was brought to Margate to be bathed in the sea for what they called a scorbutic disorder. She was in one continued scab from head to foot. She was bathed in the sea every other day for three months: during the latter part of the time the skin of one of her feet came off complete, with the nails, like a slipper which he sent inclosed in a letter to her father: the foot discharged immensely for some little time, then healed up kindly: her whole skin came to be clear, and she was taken home in fine health. He saw her in her teens a very fine woman.”

2. He says, “ A farmer in Buckinghamshire, came to Margate with intent to bathe in the sea for a scorbutic disorder, which some called a leprosy: his body was crufted all over with scales like the shell of an oyfter, and was so exceedingly itchy, that he was much worn out for want of sleep. After bathing in the sea for a month the scales loosened and came off by handfuls in bed. He drank of the water intermediately, and went home perfectly found: he returned three seasons successively after that, to secure the ground he had gained.”

3. He

3. He says, “A young gentleman, who had two venereal buboes that refused to yield to surgical treatment, came to Margate from London to bathe in the sea. On bathing they inflamed. After a fortnight they discharged freely, and soon the matter thickened, became whiter, gradually lessened in quantity, and healed up kindly: the dressings were rags dipped in seawater.”

“After that came another gentleman similarly affected, on whom the bath had similar effect,” which shews the great resolving power of the seawater in indurated glands or obstruction of any kind.

The late Mr. *Isaac Silver*, fifty-one years a surgeon at Margate, favoured me with the following case:

“A Reverend Gentleman, well known at the present day among the literati, came to Margate twenty years ago with his skin covered over in many places with thick scabby eruptions and running sores; and his face so bad as to oblige him to put his head in a case, and deny his being seen by any: by bathing a summer’s course in the sea,

and drinking a pint of elm bark decoction every day, and some sea-water once a week; he got perfectly well, and continues well at this day. His sores were dressed simply with cabbage-leaves."—His son John, his successor, remembers the case perfectly well, and that it was at the time considered as a most miraculous cure.

Several with *lepra* have come and bathed, who, the bathing guides say, received benefit, though not all equally. Two young ladies came from London a few seasons ago with incipient *lepras*, and bathed in the sea under my direction, and both got well. They bathed first in the tepid sea-water bath twice or thrice; and I made them live on a more generous diet than they had done; and they drank once a week, or so, a wine glass full of sea-water as an alterative.

Mr. *Mantell* says, "He has never known any cures of leprosy being made by sea-bathing. In most cases of elephantiasis he observes, it has been useful, but more particularly in subjects where, either from the constitution being broke down by illness, or debilitated by mercurial courses of medicine, tonics were necessary."

SCROFULA.

Sayer and the other bathing guides say, many hundreds of youth afflicted with this complaint come to Margate every year, who, by bathing in the sea and drinking the water, receive great relief after two or three months; but this and all other inherent complaints require a work of time and repetitions of the course, year after year, to eradicate them out of the habit, and to give strength, as they grow up, to man or womanhood to resist its force."

The many children left here in the winter for the benefit of sea-bathing is in proof of its efficacy in that complaint (scrofula). Its summer course is only preparatory to a winter one.

Wishing to know whether the sea-bath is radical or not in scrofula, many creditable persons in Margate vouch for it being so, and one of their proof instances is very strong: it is of a farmer in the neighbourhood, who was miserably afflicted with it in his younger days, and, by persevering in bathing, year after year, until he grew up into his teens, got to be perfectly well. He married,

ried, has got a fine family of children grown up to man and womanhood, and neither of them hath the least symptom of it.

Mr. *John Silver* has been very successful in healing scrofulous sores while under a course of sea-bathing by a mercurial lotion or solution of calomel, mucilage of gum arabic made with lime water; and I have been much in the habit myself of using a similar injection for virulent gonorrhœas, venereal and other malignant sores with great success: it is composed of calomel, chel. cancr. præparatæ, mucilage of gum arabic made with elder flower water.

SERPIGENOUS ULCERS.

Mr. *Edward Daniel*, senior, informs me a young lady of about six years old, the child of a person of distinction, sent for him lately to look at her lip; he found a dry serpigenous roughness round the edge of it. She had in town the best advice, and was ordered to bathe. As she was of a full habit, he gave her three doses of rhubarb and calomel, which emptied her sufficiently, and she bathed and drank the water alternately for three weeks, and got perfectly well.

I can-

I cannot from experience speak decidedly on the efficacy of sea-bathing in *erisipelas* or *Saint Anthony's Fire*, having seen it but in one instance tried, and it proved too irritating, inflaming, and repercussive; and even the warm sea-water applied had similar effects. The sea-water as a purge inwardly is proper.

In *labrisulscio* or tumefied lips, sea-bathing disagrees: coolers and sedatives cure them, unless scrofulous, which is not always the case.

Though the warm sea-water bath be efficacious in resolving and softening indurations of the glands, yet both hot and cold sea-water is too irritating and inflaming for ulcerated cancer.

Of the effects of sea-bathing in spasmodic, convulsive, and periodical complaints, I have received various and opposite accounts. An old female guide tells me she had epileptic fits in her younger days, and was cured by sea-bathing, which first induced her to become a sea-bathing guide. And another sea-bathing female guide (Mrs. *Phillpot*) says she hath bathed several ladies with hysteric fits that were cured; and mentions one in particular not long ago who had the complaint to so high a degree as to make her life be despaired of

of by the faculty, that after a few weeks bathing was perfectly cured, while two others (Mrs. *Thornton*, thirty-nine years a bathing guide, and Mrs. *Sayer* thirty-two years) say they do not recollect an instance either of the one or other complaint wherein sea-bathing made a cure. *Thornton* says, that she had epileptic fits herself for many years, while she was a bathing guide, which she never got rid of until about eight years ago, when they terminated in swellings of both her feet, something like that in a tonic gout. She was then sixty years of age, and obliged to give up the bathing line.

All the bathing guides agree that sea-bathing is a certain cure for *St. Vitus's Dance*, and that about a three weeks course effects it.

Mr. *Mantell* says, in hysteric affection he has found sea-bathing most serviceable, after the *pediluvia*, venæsection, and remedies to remove the first cause of this species of *neurosis*, have been unsuccessfully administered; but that an indiscriminate use of the cold bath, in his opinion, has in this complaint more frequently fixed than removed it.

Mrs.

Mrs. Sayer says she hath bathed many ladies for convulsive fits before the fit was expected to come on, and, instead of the bath shoving it off, it hastened it on even in the act of bathing; but on being brought out of the water and well rubbed with dry rubbers the circulation of the blood quickened and increased, and they soon recovered out of the fit. Says she hath bathed after a fit, by which they gained strength if they did not get rid of the fits.

I must say I have never met with any cured of *epilepsia* or *hysteria* by sea-bathing alone. I have, it is true, been successful with several young persons both in *epilepsia* and *hysteria* by sea-bathing and appropriated medicines intermediately, but with none by sea-bathing only; wherefore I consider the sea-bath to be only auxiliary in either of these complaints, though curative in some others. Different constitutions, different effects. If the affection arises from worms, vermifuges must be referred to. Sea-water is an excellent vermifuge purge, whether taken by the mouth or thrown up in clyster.

In *asthma*, *pulmonary consumption*, *cough*, *hoarseness*, *quinzy*, or other complaints of the throat,
lungs,

lungs, or chest, so far from being serviceable, it exasperates the symptoms. The hectic and consumptive may be referred to the warm sea-water bath, especially if it is from a scrofulous, or scorbutic, or venereal cause. If sea-bathing be good in any cough, I imagine it would in hooping cough, by its sedative power and bracing effect afterwards.

On taking a retrospective view of the power, operation, influence, and effect, of sea-bathing it is as used :

Strengthening or debilitating,
 Bracing or relaxing,
 Stimulant or sedative,
 Augmenting or diminishing,
 Condensing or rarefying,
 Elevating or depressing,
 Inspissating or attenuating,
 Evacuating or restringing,
 Altering or confirming,
 Purifying or vitiating,
 Heating or cooling,
 Indurating or mollifying,
 Deterging and healing,
 Irritating, inflaming, and exulcerating.

In a word, in some affection sit is curative, even specific: in others it disagrees, and in some dubious.

Sea-water and sea-bathing having thus very extensive powers, good and ill, it is for me, and for every man who professes himself a guardian of health, to be cautious and correct on whom we recommend to it, lest we become guilty, unintentionally, of a breach of the sixth command. Ignorance is not admitted as a plea of innocence for murder.

It is not uncommon for the faculty, when their patients' stomachs recoil at food and medicine, and their constitutions much worn out, to recommend a change of air, as the *derniere resort*, which has, generally speaking, either very good or very ill effect, according to circumstances, state of the case, and constitution of the air sent to. But those sent to the sea-coast, whether for the sake of air or sea-bathing, or for both, we shall suppose them not yet so far gone, but to be able to take nourishment, use exercise (cripples excepted) in the open air, to be amused, and their stomachs able to receive and retain a medicine occasionally in case of need, or they are totally inadmissible: it only hurries them a day sooner to the grave—the *domus omnium*—and make the sea-watering places a general receptacle for the dead, instead of a preservatory from the shades.

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Although we have had many excellent cures performed, and life renovated, by virtue of the air of Thanet with or without sea-bathing, yet there were still *stamina vitæ* left to work on; for, as the poet says,

“ When Nature cannot work, th’ effect of Art is void.”

As medical reasoning without fundamental principles—principles confirmed by long and reiterated experience, not only of one man, but that supported by the concurring evidence of others of large experience, candour, integrity, judgment, sagacity, and just observation, is a *vox & præterea nihil*.—I have therefore industriously courted the opinions of experienced men of the faculty on this side of the coast, and sagacious long-standing Margate sea-bathing guides, male and female, former and present, and upon their mutual relation and my experience rests the foundation of my reasoning. Some of the faculty and bathing guides have not only favoured me with their candid answers to my particular queries thereon, but added thereto their general observations; and others have shewn me important cases from time to time, and their cures performed either by the cold or warm sea-water bath, or by both;

both; and also called me in to the relief of some who had suffered by an indiscreet use of either bath, by which only can we possibly attain to a competent knowledge of the use and abuse of the baths.

GENERAL COMMUNICATIONS.

Mr. *Edward Daniel*, senior, to Dr. *Anderson*,
Ramsgate, 1793,

Says, “ Notwithstanding I have seen many cases in which sea-bathing has been of very great service, and esteem it an useful auxiliary, yet I have known many others in which it has been of no service at all, *owing either to the nature of the disorder, or the absurd use of the remedy.* You, Sir, must know there is a mode in medicine as well as in dress; witness the rage of *quicksilver, tar-water,* and now *sea-bathing*, all useful things when judi-
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ciously

ciouſly applied; but when people bathe, as too often is the caſe, merely becauſe it is the faſhion, without taking advice, what can be expected? I have often ſeen in full, groſs habits, and in ſome very tender irritable ones, eſpecially in the female ſex, very bad effects from it, the ſhock being too great for their tender frames. Indeed I have been called to ſeveral young ladies, and have found them perfectly well in every reſpect; but they thinking they wanted bathing, I have always adviſed thoſe of very delicate habits, with fine ſkins, and full, almoſt transparent, veins, to let well alone. If you ſtrain an elastic beyond its ſpring, it will break, eſpecially if it be not well tempered.

“ And farther, Sir, you will think with me, that ſea-bathing cannot counteract the irregular manner of people’s uſing it: the continual hurry of the diſſipated life too many live in at the *ſea-watering places*; their balls, plays, dancing, gaming, drinking, hot rooms, anxiety, and flutter of ſpirits, and other irregularities, muſt undo any good effects the ſea-bath might have. Innocent, rational, and well-timed amuſements are abſolutely neceſſary to our health and happineſs: it is the exceſs we blame. Sea-bathing has certainly very great and powerful ſalutary effects in
cer-

certain cases; but still it is not such a *panacea* as to meet and subdue all disorders indiscriminately, and correct all the ills of irregularity.

“ For these reasons, I think a Sea-bathing Infirmary, under proper regulations in respect to the *non-naturals*, as they are called, would be of great use to the poor who might want it, as they are too apt to follow their betters as far as they can; and under such regulations, and the medical advice they would receive, more cures from it might be expected.

“ If these few hints can be of any use to you, they are at your service; and believe me to be, with due respect, &c.”

Mr. T. Mantell to Dr. Anderson,

Says, “ Thus you will see, Sir, I have done as you desired; I have spoken my mind freely, and have given, without reserve, the few observations I have made. If any farther observations from me will be of use in this work, I will gladly recollect every case that I have had, and with pleasure submit it to your judgement.

“ Of the opinion I entertain of the medical effect to be obtained by sea-bathing, *great* as undoubtedly it is, I think it a subject on which much remains to be said ; and, that your investigation of it may be crowned with success, you will accept of the sincere wishes of him who is with much esteem, &c.”

Dover, 1793.

Mr. John Silver to Dr. Anderson,

Margate, 1793,

Says, “ If the cases I have at different times shewn you, and the observations I have made, be worthy of your notice for publication, you are welcome to them, or any I may make. I could give you scores of instances similar to your own and those you have got from others, but that would be only fact upon fact. Had physicians heretofore put us on the line of observing with nice precision the effects produced by the sea-bath, we should have been much more able to have furnished you with important facts. As they have not, I sincerely wish you success in your investigation of the subject : it is far yet from being fully discussed, or its powers accurately ascertained.

“ May

“ May you, and philanthropic colleagues in London and Margate, speedily succeed in your laudable undertaking to establish the *General Sea-bathing Infirmary* at *Margate*: an institution the most wanted in this or other country for the conservation of human lives. Any service I can be of to it in my line shall not be wanting. I am, with all due respect, &c.”

Mr. Samuel Frome to Dr. Anderson.

Broadstairs, 1793.

“ Sea-bathing, when properly used, is, no doubt, a most excellent remedy, but, like all important medicines, may prove very injurious when used with impropriety: to point out therefore where it may be serviceable, and where not, is a matter of great importance.

“ I consider the reaction in sea-bathing as similar to that of a fever in which there is a cold and a hot fit; for, upon plunging into the sea the cold water produces a chill or spasm upon the arterial system, which excites the heart and arteries to action, and thereby a warmth and general glow is felt over the whole body; and, when that is not the case, the cold sea-bath can have no good
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effect, but the warm bath should be used in its stead.

“ It is, and may be, held as a general rule that sea-bathing is only to be used where the constitution is debile, and requires to be strengthened; for that, in all plethoric and strong habits, no advantage arises from it: it is in plethoric bodies that comatose symptoms are brought on by its use.

“ I am well convinced much more may be said on the subject, which I will leave to a more able pen; but, if what I have written should meet with your approbation, I shall feel myself gratified.

“ Permit me to congratulate you, on your zeal and laudable endeavours, in promoting your excellent charity for the relief of the distressed; and, wishing much success to the undertaking,

“ I remain, Sir, respectfully, &c.”

Add to those liberal advocates of the faculty on Thanet for the Sea-bathing Infirmary, Mr. *George Slater* of *Margate*, Mr. *Christopher Mayhew* of *Ramsgate*, and others, who have not only sealed their

their approbation of it by their genteel subscription, but voluntarily make a proffer of their personal services to it. This is charity, and charity is the theological virtue of universal love :

—— ——— “ Only add
Deeds to thy knowledge, answerable, and faith ;
Add virtue, patience, temperance, add love,
By name to come call'd *Charity*, the soul
Of all the rest.”

MILTON.

There is more rhetoric in the single word *charity* than in a library of sermons. From *unfeigned* charity and brotherly love flow every noble and virtuous sentiment : from want of it every species of vice and cruelty. “ *Charity covereth a multitude of sins.*” “ *The charity or love of God is not in him that hath the sustenance of this world, and seeth his brethren have need.*” Vide Scripture.

I can say thus much for myself, that, from a scrupulous regard and zealous wish I have for the improvement and enlargement of medical science, nothing shall be wanted on my part, God willing, to answer the great end and important design of the institution. Unless we push our researches into the bosom of Nature, how can we extend

tend the boundaries of knowledge? Unless we put a torch into the hands of the inquisitive, how can we discover natural causes, and natural and preternatural effects, that will prove advantageous or disadvantageous to human kind?

Each of those respective gentlemen of the faculty on the coast, and sagacious Margate sea-bathing guides, who have kindly assisted these my endeavours for a public good, merit my most grateful acknowledgements, and every thing that is kind of a grateful public. Those who appeared equally disposed to oblige, deserve thanks also, though their observations were inadmissible, as being unsupported and indecisive. It is to be hoped they will be more accurate in future, as hundreds, nay thousands, of lives are the concern every year.

The observations I have made relative to the power and efficacy of the warm sea-water bath I reserve for another tract.

In the course of the foregoing narrative I might have enlarged much more upon the use and abuse of sea-bathing; I might have given the *ætiology* of diseases, their causes, symptoms, and medicinal and dietetical processes; but, after all, it would not
 2 have

have precluded the necessity of taking and following judicious medical advice: to have done it would not only have led off the medical reader from distinguishing accurately between the power of the medicine and the bath, but have led the common reader into a labyrinth of obscurity. And though these observations are meant for the common as well as medical reader; having, for that purpose, industriously avoided all technical terms, yet I do not pretend to impossibilities, i. e. to make every man his own physician; vain, absurd, and dangerous in the extreme; for, I who have written prescriptions as a physician these twenty years and upwards, and other physicians who have done it twice as long upon rational principles, and attended closely to Nature and her ways, meet with something new every day; I do not therefore pretend to be a teaching master but a teaching scholar. Physic has done ten times more harm than good in the hands of *ignorance*. Genius, learning, long and severe study, and deep reflection, are required to comprehend it.

Finally, in drawing up my evidence, I have candidly stated the facts on both sides: to have given all on one side, and not on the other, would have been partial, uncandid, and deceptive. I have considered it therefore as much for me to

forbid improper objects coming that might receive injury as to invite proper ones to come and receive a benefit: by so doing I do justice to the Water, justice to the Public, and justice to the *Prescriber and Director*.

THE END.